



Jurisdiction Profile:

# Asthma in Prince George's County

## Background

**What is Asthma?** Asthma is a controllable, chronic lung disease characterized by inflammation of the airways that leads to reversible airway constriction and excess mucus secretion. Narrowing of the airways results in reduced airflow that may cause symptoms of wheezing, coughing, tightness of the chest, and difficulty breathing.

Asthma is a serious and complex chronic respiratory disease with no known cure that currently affects an estimated 823,000 Maryland adults and children. In 2009, asthma in Maryland resulted in 11,474 hospitalizations, 39,834 visits to hospital emergency departments, thousands of hours of lost school and work days, and 67 deaths. Maryland costs for asthma in hospital and emergency departments totaled over \$99 million in 2009. Due to the burden on patients, families, and society, asthma is considered a major public health concern in Maryland and nationally.

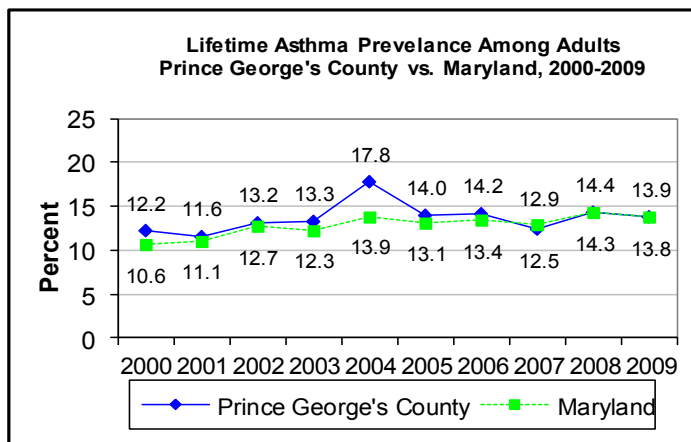
Prince George's County Population Demographics, 2009		
Race	White	236,780
	Black	556,928
Age	0 - 4 yrs	60,333
	5 - 17 yrs	146,247
	18 - 64 yrs	548,757
	65+ yrs	79,223
	Total	834,560

**Data** in this report are from Maryland's Behavioral Risk Factor Surveillance System (BRFSS), Maryland Health Services Cost Review Commission (HSCRC), and Maryland's Vital Statistics Administration (VSA). Rates are calculated based on population statistics from the CDC's National Center for Health Statistics (NCHS) vintage population files. Data have been age-adjusted to the 2000 U.S. estimated population where noted. Since some Maryland residents are hospitalized in neighboring states, data on hospitalization of Maryland residents from Delaware, Pennsylvania\*, Washington D.C., and West Virginia are included when possible.

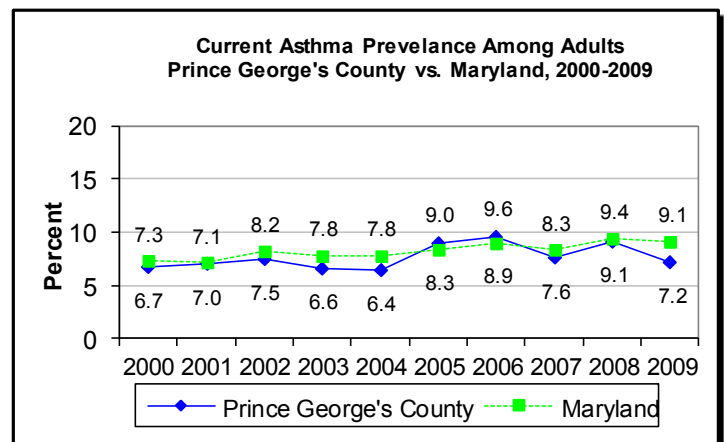
## Prevalence

Statewide in 2009, approximately 594,609 (13.9%) Maryland adults had a history of asthma. In Prince George's County, approximately 13.8% of adult residents had been diagnosed with asthma. Of these, 7.2% reported that they currently have asthma, representing approximately 38,831 adults in Prince George's County.

While asthma is one of the most common illnesses among children, there is little reliable county level data on the prevalence of asthma in children.



Maryland BRFSS, 2000-2009.



Maryland BRFSS, 2000-2009.

\* "The Pennsylvania Health Care Cost Containment Council (PHC4) is an independent state agency responsible for addressing the problem of escalating health costs, ensuring the quality of health care, and increasing access to healthcare for all citizens regardless of ability to pay. PHC4 has provided data to this entity in an effort to further PHC4's mission of educating the public and containing health care costs in Pennsylvania. PHC4, its agents, and staff, have made no representation, guarantee, or warranty, expressed or implied, that the data -- financial, patient, payor, and physician specific information -- provided to this entity, are error-free, or that the use of the data will avoid differences of opinion or interpretation. This analysis was not prepared by PHC4. This analysis was done by MACP. PHC4, its agents and staff, bear no responsibility or liability for the results of the analysis, which are solely the opinion of MACP."

## Emergency Department Visits

### Asthma Emergency Department Visit Rates (per 10,000) Prince George's County vs. Maryland, 2009

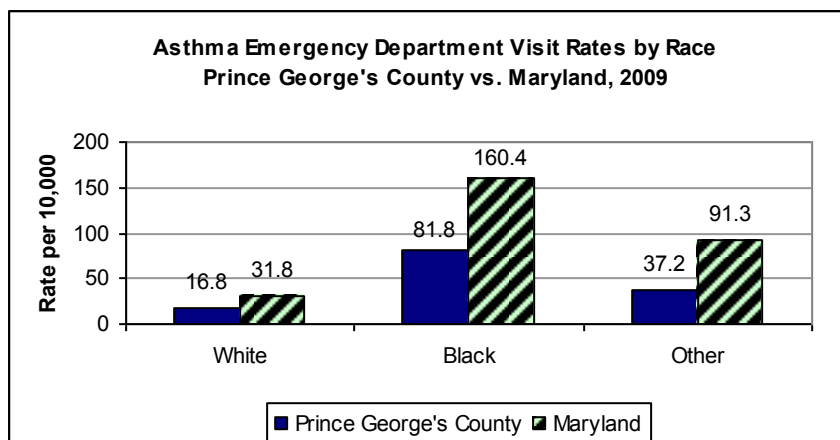
Age	Prince George's County		Maryland	
	n	Rate	n	Rate
Children 0 - 4 yrs	757	125.5	7,443	195.6
5 - 17 yrs	1,534	100.5	11,077	114.7
< 18 yrs	2,291	106.5	18,520	136.1
Adults 18 - 64 yrs	2,655	49.2	20,296	56.3
65+ yrs	145	18.3	1,018	14.7
≥ 18 yrs	2,800	44.0	21,314	50.3
Total	5,091	61.1	39,834	72.3

Maryland HSCRC, 2009.

<sup>a</sup> Rates are age-adjusted to the 2000 U.S. standard population.

In Prince George's County, the asthma ED visit rate was approximately 4.9 times higher among Black residents and 2.2 times higher among Other residents compared to White residents (81.8 and 37.2 vs. 16.8 per 10,000).

The asthma ED visit rate in Prince George's County was lower in all race categories compared to Maryland.

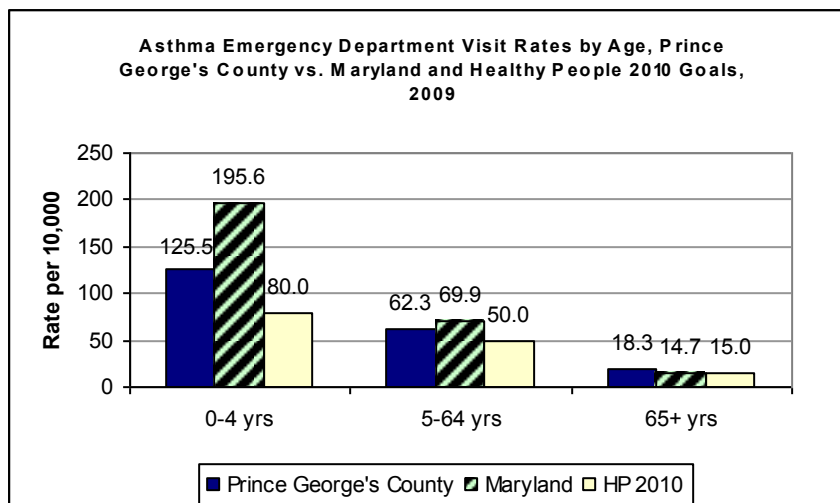


Maryland HSCRC, 2009.

<sup>a</sup> Rates are age-adjusted to the 2000 U.S. standard population.

In 2009, Prince George's County exceeded the Healthy People 2010 asthma ED visit rate goals for all age groups.

Maryland ED visit rates exceeded Healthy People 2010 goals for all age groups with the exception of the adult age group of 65 years of age and older.



Maryland HSCRC, 2009; DATA2010 Healthy People 2010 Database, U.S. DHHS, 2010.

<sup>a</sup> Rates are age-adjusted to the 2000 U.S. standard population.

## Hospitalizations

### Asthma Hospitalization Rates (per 10,000)

#### Prince George's County vs. Maryland, 2009

Age	Prince George's County		Maryland	
	n	Rate	n	Rate
Children 0 - 4 yrs	246	40.8	1,834	48.2
5 - 17 yrs	247	15.5	1,400	17.4
< 18 yrs	493	21.5	2,976	25.4
Adults 18 - 64 yrs	808	14.2	5,867	9.5
65+ yrs	246	31.1	2,087	30.0
≥ 18 yrs	1,054	16.1	7,954	13.2
Total	1,547	18.6	11,474	19.8

MD HSCRC, DE Dept of Health, PA Health Care Cost Containment Council, WV Health Care Authority, 2009.

<sup>a</sup> Rates are age-adjusted to the 2000 U.S. standard population.

<sup>b</sup> Includes Maryland residents hospitalized in Delaware, Pennsylvania, Washington D.C., and West Virginia (MD county data not available for Delaware hospitalizations; MD state data only includes Delaware for total, 0-4, and 65+ due to age groupings).

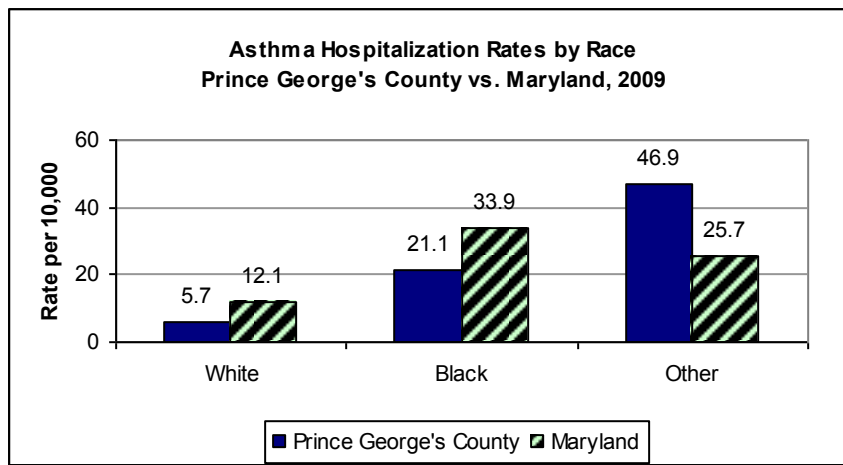
There were 1,547 hospitalizations for asthma as a principal diagnosis in Prince George's County in 2009, resulting in an age-adjusted rate of 18.6 per 10,000.

The hospitalization rate for asthma among adult residents (≥ 18 years) in Prince George's County was comparable to the hospitalization rate for Maryland adults as a whole (16.1 vs. 13.2 per 10,000).

The hospitalization rate for asthma among children (< 18 years) in Prince George's County was comparable to the hospitalization rate for Maryland children (21.5 vs. 25.4 per 10,000).

In Prince George's County, the asthma hospitalization rate was approximately 3.7 times higher among Black residents and 8.2 times higher among Other residents compared to White residents (21.1 and 46.9 vs. 5.7 per 10,000).

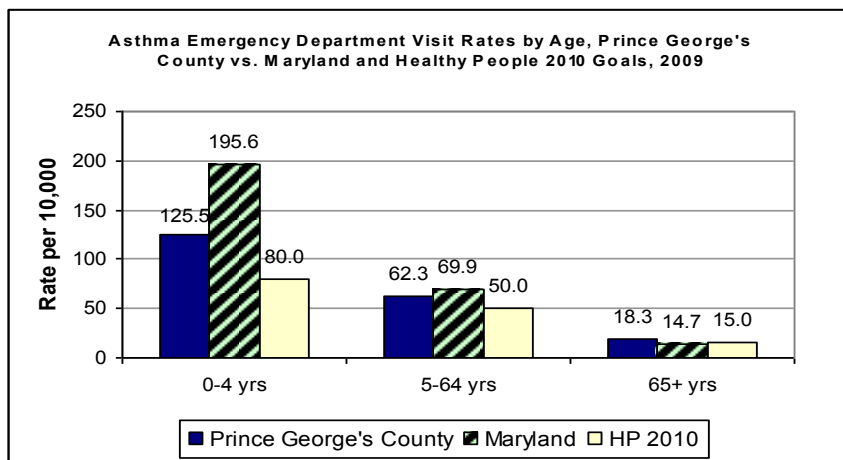
The asthma hospitalization rates in Prince George's County were lower in the White and Black race categories compared to Maryland.



Maryland HSCRC, 2009; Pennsylvania Health Care Cost Containment Council, 2009.

<sup>a</sup> Rates are age-adjusted to the 2000 U.S. standard population.

In 2009, Prince George's County and Maryland exceeded the Healthy People 2010 asthma hospitalization rate goals for all age groups.



MD HSCRC, DE Dept of Health, PA Health Care Cost Containment Council, WV Health Care Authority, 2009.

<sup>a</sup> Rates are age-adjusted to the 2000 U.S. standard population.

<sup>b</sup> Includes Maryland residents hospitalized in Delaware, Pennsylvania, Washington D.C., and West Virginia (MD county data not available for Delaware hospitalizations; MD state data only includes Delaware for total, 0-4, and 65+ due to age groupings).

## Cost of Asthma

The average cost per asthma ED visit for children was \$546 in Prince George's County and \$658 in Maryland. The average cost per asthma ED visit for adults was \$494 in Prince George's County and \$647 for Maryland. The total average cost for an asthma ED visit in Prince George's County was found to be statistically different than the state of Maryland.

In Prince George's County, private insurance was the source of payment for approximately 51.4% of asthma ED visits, while public insurance was the source of 30.7% of the visits.

Private insurance was the source of payment for approximately 34.2% of asthma ED visits in Maryland, while public insurance was the source for 45.6% of the visits.

The average cost per asthma hospitalization for children was \$4,519 in Prince George's County and \$5,403 in Maryland. The average cost per asthma hospitalization for adults was \$6,799 in Prince George's County and \$7,397 in Maryland. The total average cost for an asthma hospitalization in Prince George's County was found to be statistically different than the state of Maryland.

In Prince George's County, private insurance was the source of payment for approximately 37.8% of all 2009 asthma hospitalizations, while public insurance was the source of 49.1% of the stays.

Private insurance was the source of payment for 30.6% of asthma hospitalizations in Maryland, while public insurance was the source for 60% of the asthma hospitalizations.

### Costs per Emergency Room Visit for Asthma, 2009

Age	Prince George's County		Maryland	
	Average	Total	Average	Total
Children (0-17 yrs)	\$546	\$1,251,878	\$658	\$12,188,425
Adults (18+ yrs)	\$494	\$1,382,242	\$647	\$13,795,690
Total	\$517	\$2,634,120	\$652	\$25,984,115

Maryland HSCRC, 2009.

### Source of Payment for Asthma Emergency Room Visits, 2009

Source of Payment	Prince George's County	Maryland
Medicare	4.0%	5.2%
Medicaid	26.7%	40.4%
Private Insurance	51.4%	34.2%
Self Pay/Charity	17.2%	18.6%
Other/Unknown	0.7%	1.6%

Maryland HSCRC, 2009.

### Costs per Hospitalization for Asthma, 2009

Age	Prince George's County		Maryland	
	Average	Total	Average	Total
Children (0-17 yrs)	\$4,519	\$709,454	\$5,403	\$16,078,883
Adults (18+ yrs)	\$6,799	\$6,309,595	\$7,397	\$57,274,922
Total	\$6,469	\$7,019,049	\$6,843	\$73,353,805

Maryland HSCRC, 2009.

### Source of Payment for Asthma Hospitalizations, 2009

Source of Payment	Prince George's County	Maryland
Medicare	27.9%	26.0%
Medicaid	21.2%	34.0%
Private Insurance	37.8%	30.6%
Self Pay/Charity	12.4%	7.7%
Other/Unknown	0.7%	1.7%

Maryland HSCRC, 2009.

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